

**METHOD FOR PRODUCING A SINTERED, SUPPORTED
POLYCRYSTALLINE DIAMOND COMPACT**

ABSTRACT OF THE DISCLOSURE

A sintered supported polycrystalline diamond compact (PCD) having improved abrasion resistance properties is manufactured by subjecting diamond crystals placed in adjacency with a metal carbide support containing a catalyst/sintering aid to high pressure/high temperature (HP/HT) processing. Said PCD compact comprises: a) a body of diamond crystals comprising a mixture of about 60 wt% to about 80 wt. % of coarse fraction having an average particle size ranging from about 30 to 60 μm and a fine fraction being about not substantially greater than about 20% of the average particle size of said coarse fraction; and b) a support body comprising about 12 wt. % or less of a catalyst/sintering.